

UNIVERSITY OF THESSALY

LABORATORY OF MICROBIOLOGY & FOOD BIOTECHNOLOGY

LABORATORY OF QUALITY CONTROL OF WOOD, FURNITURE AND WOOD CONSTRUCTION

TECHNICAL DATA SHEET

26/11/2020

ANTIBACTERICAL SURFACES

The antibacterial and anti-mildew properties for **ALFA WOOD GROUP S.A.** decorative surfaces are certified by Laboratory of Microbiology & Food Biotechnology and Laboratory of Quality Control of Wood, Furniture and Wood Construction and remain unchanged over time for the entire life cycle of the product.

Antibacterial tests conducted according to the ISO22196:2011 and ASTM D3273 methods, proves inhibition to the growth and reduction of the number of bacteria the 24 hours of > 80% and fungal during 15 and 27 days.

The results are presented below:

| Samples | 1 | 2 | 3 | |
|------------|----|----|----|--|
| P.expansum | 10 | 10 | 10 | |
| A.niger | 10 | 10 | 10 | |

| Staphylococcus aureus | cfu/ml | | log cfu/ml | Staphylococcus aureus | cfu/ml |
|-----------------------|---------------------|--------|-------------|-----------------------|----------|
| Control | 1,5x10 ⁵ | 150000 | 5,176091259 | | |
| Control | 5x10 ⁵ | 500000 | 5,698970004 | Control | 5,437531 |
| Alfa Wood Surfaces | 1,6x10 ¹ | 16 | 1,204119983 | | |
| Alfa Wood Surfaces | 1×10 ² | 100 | 2 | Alfa Wood Surfaces | 1,60206 |

| Escherichia coli | cfu/ml | | log cfu/ml | Escherichia coli | cfu/ml |
|--------------------|---------------------|------|-------------|--------------------|---------|
| Control | 3x10 ³ | 3000 | 3,477121255 | 1 | |
| Control | 2,8x10 ³ | 2800 | 3,447158031 | | 3,46214 |
| Alfa Wood Surfaces | <1 | <1 | <1 | Alfa Wood Surfaces | |
| Alfa Wood Surfaces | <1 | <1 | <1 | | 0,8 |

Approved and signed by

Dr George Ntalo

Head of the Laboratory of Quality Control